Università della Svizzera italiana Institute of Oncology Research

SNF ERC founded four-year Postdoctoral Fellowships (100%)

In the Molecular Oncology Group Directed by Prof. Andrea Alimonti at the IOR - Institute of Oncology Research in Bellinzona, Switzerland <u>http://ior.usi.ch/</u>

Two 4-year postdoctoral fellowship positions are available, in the lab of Prof. Andrea Alimonti at IOR (https://ior.usi.ch/en/group/molecular-oncology) to study the role of gut and intratumoral microbiota in cancer and treatment resistance (e.g., Brina et al., Pernigoni et al., Nature Review Urology, 2023, Nat Cancer 2023; Bancaro et al., Cancer Cell 2023; Troiani et al. Nat Commun 2022; Pernigoni et al., Science, 2021; Guccini et al., Cancer Cell 2020; Montopoli et al., Ann Oncol 2020; Alajati et al., J Clin Invest 2020, Di Mitri et al., Cell Rep 2019; Chen et al., Nat Genet 2018; Calcinotto et al., Nature 2018; Revandkar et al., Nat Commun 2016; Kalathur et al., Nat Commun 2015; Toso et al., Cell Rep, 2014; Di Mitri et al., Nature, 2014).

The successful candidates will be part of an ongoing effort to elucidate the role of the gut **microbiota** and **intratumoral bacteria** in cancer, identifying and targeting novel regulators of cancer initiation, progression, and treatment resistance. The candidates will also use and **implement an innovative propriety microfluidic platform to identify live bacterial products** with anti-cancer properties.

In addition, the recruited postdocs will use different approaches (10X genomics single cell, metagenomics, proteomics, metabolomics, drug screenings) and generate novel mouse models to understand if and how bacteria and fungi control prostate tumor development. The research will be performed in a vibrant environment of scientists, including microbiologists, cancer biologists, immunologists and clinicians also collaborating with a promising startup in the microbiota field.

We are looking for highly motivated candidates with outstanding basic and cancer biology expertise, coupled with microbiology expertise to join an established, multicultural group of more than 20 talented scientists. Experience with in vivo cancer models is required, and bioinformatics knowledge would be considered a plus. We require at least one first-author original research publication in a high-impact factor paper, the ability to drive discovery by working independently, interacting with colleagues with different backgrounds, and establishing relevant collaborations.

The IOR, affiliated with the Università della Svizzera Italiana (USI), is in a brand-new high-tech research building that hosts more than 20 different research groups. It has state-of-the-art labs and facilities, which include a fully new microbiology lab, equipped with anaerobic hoods and an incubator, and an innovative microfluidic system for bacteria (Prospector ® by Isolation Bio). Together with the Institute for Research in Biomedicine (IRB), the IOR is a member of Bios+, a non-profit association aiming to promote, support, and coordinate its members' scientific research and teaching activities (www.biosplus.ch). IOR offers a multicultural environment and daily occasions of interaction with world leaders in the fields of cancer, basic immunology, and cancer



IOR An institute affiliated to USI immunology, a thriving environment, an exciting research project and multiple occasions of interaction with world leaders in the fields of cancer, basic immunology, and cancer immunology (see Ph.D. lecture series at <u>https://ior.usi.ch/education/phd-program</u>).

Prof. Alimonti fosters the **professional growth** of postdoctoral associates: out of eight past fellows, seven secured independent PI positions in Switzerland and abroad.

Prof. Alimonti is also an ETH professor, which allows the lab members to take advantage of all the ETH facilities and the vibrant, collaborative environment of ETH.

The positions are fully funded by an SNSF Advanced grant. Salary will be competitive and commensurate with the candidate's experience. A full benefits package will be available, including e.g. gym and car fleet discounts.

Initial appointment: 1 year (renewable) - 100%.

Please submit your application in a single PDF-File including the following documents at <u>humanresources@ior.usi.ch</u>

Reference in the email object: AA_PostDoc_Microbiota_2024:

- CV
- Motivation Letter
- 2 Reference Letters (or contact details of referees)

For scientific and position-related questions please contact nicoletta.delia@ior.usi.ch For administrative questions, please contact <u>humanresources@ior.usi.ch</u>

Applications sent to different contacts, in other formats, or after the deadline will not be considered. Shortlisted candidates will be invited for a one-day on-site interview.

Deadline February 29th, 2024 Starting date April 1st, 2024

More information about the Institute is available at www.ior.usi.ch

